1. Bank

Program Name: Bank.java Input File: bank.dat

You are a text analyst working for a bank and are given a series of text lines to read and analyze. Management wants a list of all the numbers in each line of text but is not concerned about what they are or what they mean. As one form of analysis, they want you to provide them a sum of these numbers in each line of text.

Your job is to print each number in each line of text, in the order they appear, with single space separation, with their sum on the next line. A number is defined as any whole number. For example, $4.20 would be considered two separate numbers: 4 and 20.

Input

The first line will be a single integer N, the number of text lines to read.
The remaining lines are each text lines to be read. These lines can consist of spaces, alphanumeric characters, and punctuation. The numbers to read will be non-negative integers between 0 and 1073741824, and may contain preceding zeros that are not to be printed. Their sum will also be between 0 and 1073741824.

Output

For every text line there should be two lines of output: a list of numbers and a sum. Between the numbers in the list should be exactly one space. Should there be no numbers, the list line should simply be a dash, "-", and the sum 0.

Example Input File

```
6
Stanley worked for a company in a big building as employee number 427.
Employee 427's job was simple: he sat in room 427 and worked at his desk.
Stanley was happy.
That coffee will cost you $4.20.
Linux L1 3.5.0-45-generic #68-Ubuntu SMP Mon Dec 2 21:58:52 x86_64 GNU/Linux
2,014 CE
```

Example Output to Screen

```
427
427
427 427
854
-
0
4 20
24
1 3 5 0 45 68 2 21 58 52 86 64
405
2 14
16
```